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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,552	08/20/2001	Yves Ramanzin	FR 000079	6551

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EXAMINER

ENG, MARSHALL S

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,552

Applicant(s)

RAMANZIN, YVES

Examiner

Marshall S Eng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/20/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 4,5,8,11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1.1 Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France on 31 July 2000. It is noted, however, that applicant has not filed a certified copy of the FR 0010048 application as required by 35 U.S.C. 119(b).

1.2 Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in France on 31 July 2000. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

Drawings

2.1 The drawings are objected to because the boxes K12 and K16 of Figure 5 should each have an "N" marking the line that is the "No" output of the decision boxes.

2.2 The drawings are objected to because the boxes K32 and K42 of Figure 6 should each have a "Y" marking the line that is the "Yes" output of the decision boxes.

2.3 The drawings are objected to because the boxes K34, K50, and K54 of Figure 6 should each have a "N" marking the line that is the "No" output of the decision boxes.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3.1 The abstract of the disclosure is objected to because it is more than two paragraphs. Correction is required. See MPEP § 608.01(b).

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3.2 Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Q Specifically, the abstract uses the legal phraseology "means" in lines 7 and 9, and exceeds two paragraphs.

3.3 The disclosure is objected to because of the following informalities: the phrase "K16" on line 21 of page 4 should be "C16."

3.4 The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 5 recites the limitation "said transmission means" and "said insertion means" in line 2 of claim 5.

Appropriate corrections are required.

Claim Objections

4.1 Claims 4 and 11 are objected to because of the following informalities: the description of robust and uncertain given in these claims appears to be inconsistent with the specifications and drawings. Claims 4 and 11 both state that "robust mode permitting to accept more errors than the uncertain mode for the purpose of validating the useful data." Figures 5 and 6 clearly show that if the calculated syndrome is 0 (and

hence the information signal header has no errors) the mode is set to ROBUST.

Conversely, if the calculated syndrome is not equal to 0, the mode is set to UNCERTAIN (and hence the information signal header is found to contain error(s)).

Therefore, it is unclear how ROBUST can be used to describe the mode when there are no errors (as in Figures 5 and 6) and used to describe the mode that permits more errors than the uncertain mode (as it is used in claims 4 and 11).

4.2 Claim 8 is objected to because of the following informalities: it is unclear whether claim 8 is an independent claim claiming a method or a dependent claim (depending upon claim 1). For the purposes of examination, it is being read as an independent claim.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

5.1 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5.2 Claim(s) 1-7 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Wimmer et al. U.S. Patent No. 6,625,223 (hereinafter Wimmer).

As per claim 1,

Wimmer substantially teaches of a transmission system, see lines 4-6 of Abstract and Figure 2, a transmitting part comprising transmission circuitry for processing data to form series of information signals (i.e. grouping data into data segments and

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transmitting those segments), see lines 2-6 of Abstract, a receiving part comprising receiving circuitry for processing the transmitted information signals (segments), see lines 6-8 of Abstract.

Wimmer further teaches of integrity verification means for producing an error indication of the transmitted information, see column 3, lines 47-55.

Wimmer does not explicitly teach of validating the data even if an error indication appears. Nonetheless, Wimmer does teach of increasing the probability of correctly decoding a data segment whose header section contains errors, see lines 43-55 of column 4. Wimmer has essentially taught of validating (i.e. high probability of correctness) data that has produced an error indication (i.e. header error).

As per claim 2,

Wimmer further teaches of forming the header for each of the data segments, see lines 30-55 of column 3. While not specifically teaching that the integrity verification influences the headers, Wimmer does teach that the headers contain error recognition/correction data, see lines 47-55 of column 3. The integrity verification of the applicant is simply the analysis of the header to determine if an error has occurred in the header during transmission. By including error recognition/correction data, Wimmer is teaching that the integrity verification (i.e. header error detection) influences the headers (by including an error recognition/correction field within the header).

As per claim 3,

Wimmer further teaches of calculating and transmitting the segment length field (MPL) within the header, see lines 38-45 of column 3. While not explicitly teaching of

inserting means, it is evident that the MPL field must be inserted into the header to be transmitted. Further, Wimmer teaches that if the header information is not decoded (i.e. an error has occurred) then the length field (MPL) cannot be used. One skilled in the art would see that if either the header check information does not decode successfully or if the MPL field does not match the received data segment, then there is an error somewhere within the current data segment and hence mark the segment as containing an error.

As per claim 4,

As note above under claim objections, the definitions for robust and uncertain are inconsistent between the specifications and the claims. Therefore, for the purpose of examining, they are read as follows: a robust mode indicates a mode in which there are no errors in the header and the MPL data matches up while uncertain mode indicates that an error has been detected within the header data.

Nonetheless, Wimmer does teach of skipping a segment whose header is found to have errors and attempt to locate the sync for the following segment, see lines 44-49 of column 4. Further one of ordinary skill in the art can tell that by skipping the segment with an error in the header and inspecting the following segment, Wimmer does classify segments by the amount of correctable decoding probabilities.

While Wimmer does not teach of management means for determining transmission quality modes, it would have been obvious to one of ordinary skill in the art to mark certain segments/packets as more reliable than others. Clearly, one skilled in the art would want to be able to differentiate between packets/segments that do not

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contain any errors in the headers (i.e. packets received in Robust mode) from those that clearly do (i.e. packets whose, in the case of Figures 5 and 6 of the specifications, syndromes are not equal to zero and therefore contain errors). One skilled in the art would want the types of packets to be marked separately so as to be able to read/inspect/use certain segments more reliably (i.e. Robust ones) than others (i.e. uncertain ones). Clearly uncertain segments contain errors and are less likely to produce the same data that was initially transmitted.

As per claim 5,

Wimmer further teaches of a transmitter that is capable of inserting the MPL data, see claim 3 above, and of transmitting data that has been formed into series of signals, see claim 1 above. (see Abstract, lines 1-7, specifically "data segments are transmitted from a first computer to a second computer")

As per claim 6,

Wimmer further teaches of a receiver that comprises integrity verification means. By disclosing a method of forming a header that is protected with error detection/correction, see lines 30-55 of column 3, and how the header is used on the receiving end to verify the data, see lines 35-55 of column 4, Wimmer is teaching a receiver that is capable of detecting errors within the header. By detecting errors within the header, Wimmer is teaching of integrity verification means.

As per claim 7,

Wimmer further teaches of electronic equipment comprising transmitting and receiving parts capable of carrying out the system of claim 1, see Abstract.

5.3 Claim(s) 8-11 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Wimmer et al. U.S. Patent No. 6,625,223 (hereinafter Wimmer).

As per claim 8,

Wimmer, as noted above in the rejection of claim 1, teaches of a system as claimed in claim 1.

Wimmer further teaches of transmitting data by series of information signals, see Abstract lines 1-4, that comprises creating and forming a header for the data, see lines 30-55 of column 3, of analyzing the header for producing error indications, see lines 35-55 of column 4, and of accepting the data for certain error conditions, see lines 42-48 of column 4.

While Wimmer does not explicitly teach of positioning the header for the useful data, it would have been obvious to one of ordinary skill in the art at the time the invention was made that creating the header data and forming the header are essentially equivalent to positioning the header (i.e. placing the header data in appropriate slots, or in other words forming the header).

As per claim 9,

Wimmer further teaches of inserting an error coding information signal into the header that is used to produce an error indication (if an error occurs during transmission), see lines 48-55 of column 3.

As per claim 10,

Wimmer further teaches of calculating and transmitting a segment length field (MPL) within the header, see lines 38-45 of column 3. While not explicitly teaching of

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inserting means, it is evident that the MPL field must be inserted into the header to be transmitted. Further, Wimmer teaches that if the header information is not decoded (i.e. an error has occurred) then the length field (MPL) cannot be used. One skilled in the art would see that if either the header check information does not decode successfully or if the MPL field does not match the received data segment, then there is an error somewhere within the current data segment and hence mark the segment as containing an error.

As per claim 11,

As note above under claim objections, the definitions for robust and uncertain are inconsistent between the specifications and the claims. Therefore, for the purpose of examining, they are read as follows: a robust mode indicates a mode in which there are no errors in the header and the MPL data matches up while uncertain mode indicates that an error has been detected within the header data.

Nonetheless, Wimmer does teach of skipping a segment whose header is found to have errors and attempt to locate the sync for the following segment, see lines 44-49 of column 4. Further one of ordinary skill in the art can tell that by skipping the segment with an error in the header and inspecting the following segment, Wimmer does classify segments by the amount of correctable decoding probabilities.

While Wimmer does not teach of management means for determining transmission quality modes, it would have been obvious to one of ordinary skill in the art to mark certain segments/packets as more reliable than others. Clearly, one skilled in the art would want to be able to differentiate between packets/segments that do not

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contain any errors in the headers (i.e. packets received in Robust mode) from those that clearly do (i.e. packets whose, in the case of Figures 5 and 6 of the specifications, syndromes are not equal to zero and therefore contain errors). One skilled in the art would want the types of packets to be marked separately so as to be able to read/inspect/use certain segments more reliably (i.e. Robust ones) than others (i.e. uncertain ones). Clearly uncertain segments contain errors and are less likely to produce the same data that was initially transmitted.

Conclusion

6.1 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Chapter 31 Wireless Video Communications" of the book "Mobile Communications Handbook" by Budagavi et al. This reference teaches specifically of ITU h.223 Level 2 (Annex B) wherein communication is performed over moderately error-prone channels. This level contains protection on the header (integrity verification) through the use of a Golay code and includes an MPL field within the header. Further noted is the fact that the MPL field is used to help in the delineation of packet boundaries (i.e. validate sizes).

b. Mackelburg et al.

U.S. Patent No. 5,018,114

This reference teaches of a transmission system in which a header checksum is used to determine if an error has occurred in the transmission. After this determination, the header is stripped off and an attempt to reconstruct the transmitted data ensues, whether the checksum is correct or not.

c. Eidler et al.

U.S. Patent No 5,315,708

This reference teaches of validating transferred data and of using data lengths to help ensure correct transmission.

d. RFC 791 – Internet Protocol

This reference teaches of the use of a header checksum and the use of a length field within the header. While the IP protocol is designed to use a type of ARQ system, it is clear that in a system where retransmission delays are unacceptable, some form of data validation (even packets found to be in error) would be desired.

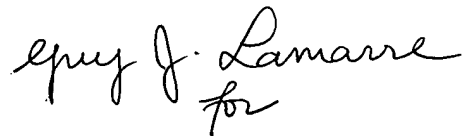
6.2 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marshall S Eng whose telephone number is (703) 305-4638. The examiner can normally be reached on M-F, 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



mse



Albert DeCady
Primary Examiner